

【例3】小船在200 m宽的河中横渡,水流速度为2 m/s,船在静水中的速度为4 m/s。

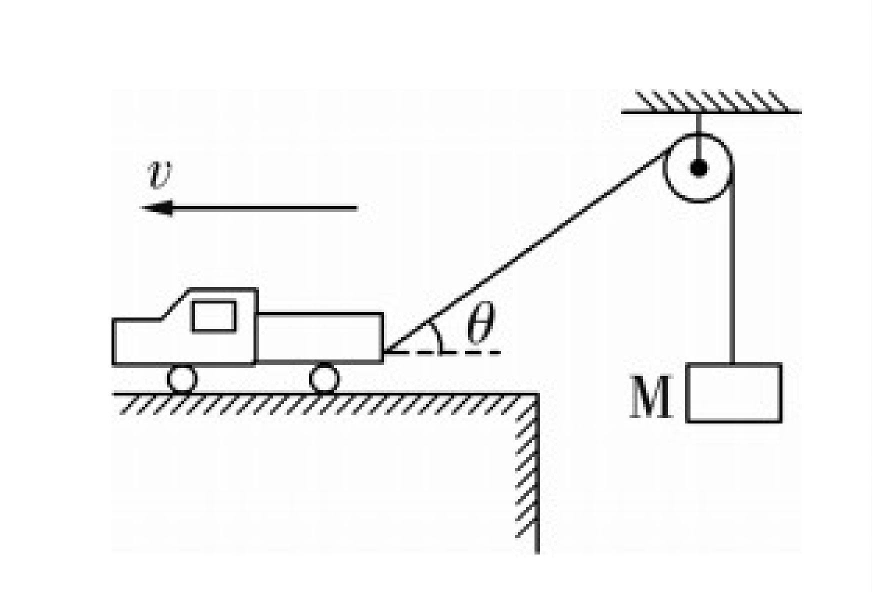
(1)若小船的船头始终正对对岸,它将在何时、何处到达对岸?

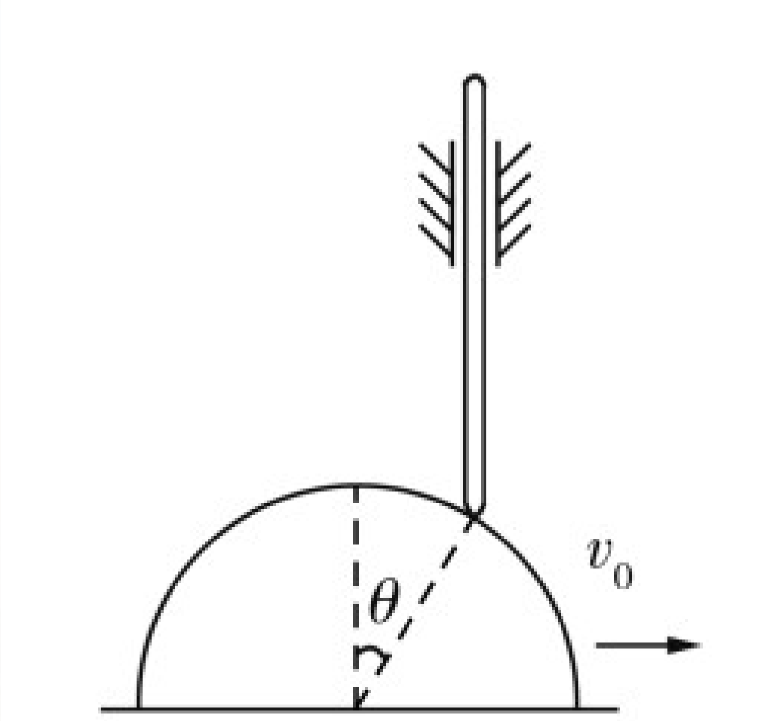
(2)要使小船到达正对岸,应如何航行? 历时多久?

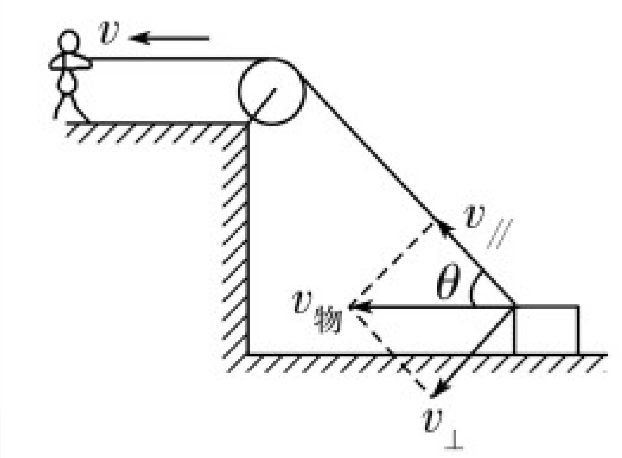
(3)小船过河的最短时间为多少?

(4)若水流速度是5 m/s,船在静水中的速度为3 m/s,则怎样过河才能使船漂向下游的距离最小? 最小距离是多少?

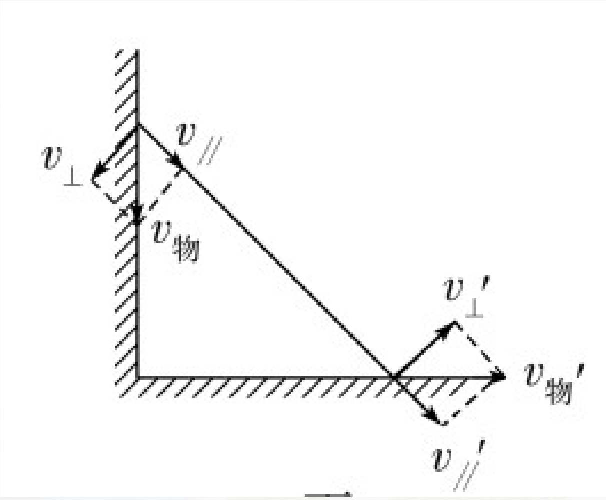
(5)若水流速度是5 m/s,小船在60 m宽的河边,从这里起在下游80 m处的河水变成瀑布。为了使小船能安全渡河,则小船相对于静水的速度不能小于多少?


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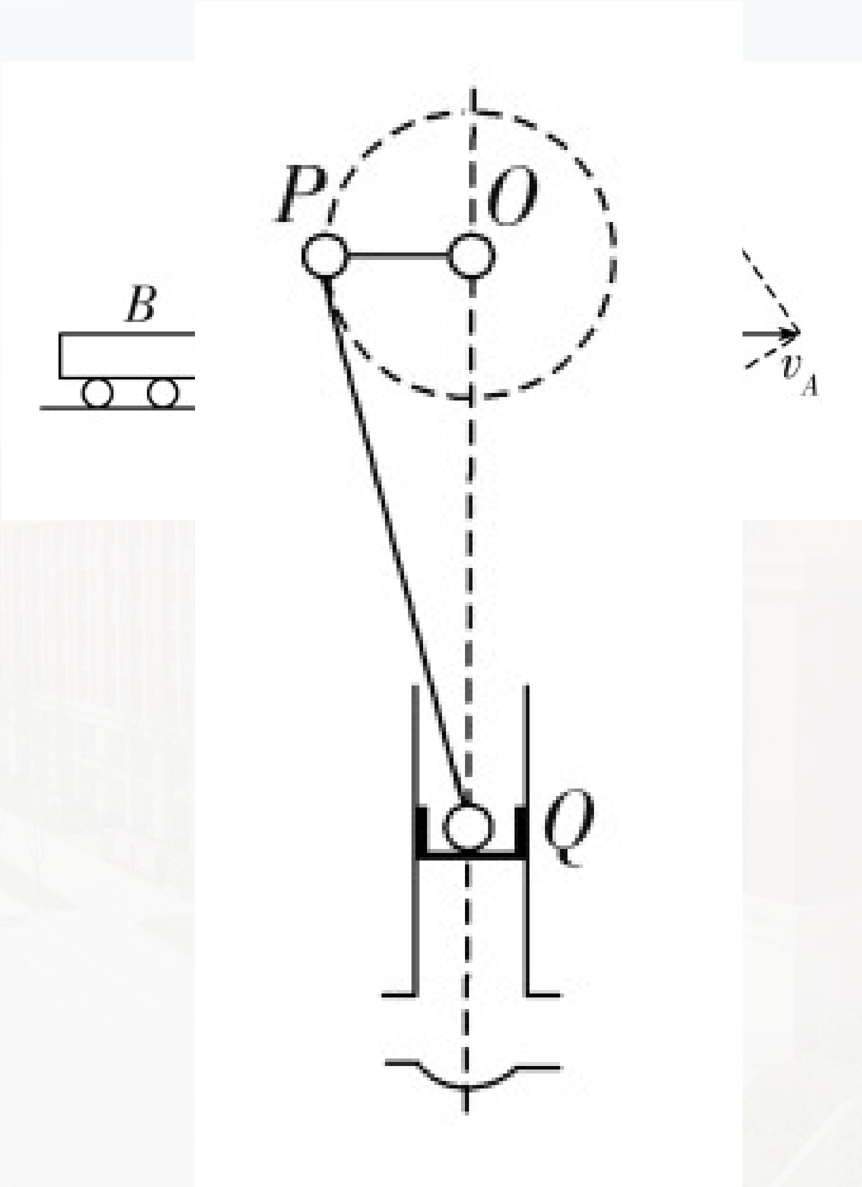

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